REPORT OUTLINE SHEET

CHEMICAL: Aqucar X14

TEST MATERIAL: Glutaraldehyde 14.0%
Alkyl dimethyl benzyl ammonium chloride.. 2.5%
Total 16.5%

STUDY TYPE: Avian Eight-Day Dietary LC_{50}

Test Species: Mallard Duck (Anas platyrhynchos)

STUDY I.D.: Beavers, J.B.; Jaber, M. (1984) Acute Dietary LC_{50} Test For Waterfowl and Upland Game Birds; Project No. 142-133; Prepared by Wildlife International Ltd. For Union Carbide Corporation, P.O. Box 670, Bound Brook, New Jersey 08805; MRID No. 421104-01.

REVIEW BY:
Name: Curtis E. Laird
Title: Fishery Biologist
Organization: EEB/EFED
Signature: Curtis E. Laird
Date: 1-31-92

APPROVED BY:
Name: Allen Vaughan
Title: Supervisory Biologist
Organization: EEB/EFED
Signature: Allen W. Vaughan
Date: 3.9.92

CONCLUSIONS:

This study indicates Aqucar is practically nontoxic to Mallard Duck with an LC_{50} > 5620 ppm. This study does fulfill the requirement in support of registration for an avian dietary LC_{50} study using a formulated product.

RECOMMENDATIONS: N/A

BACKGROUND:

This study was submitted for EEB review.

DISCUSSION OF INDIVIDUAL TESTS OR STUDIES:

This study was conducted with a formulated product using a mixture of 14.0% glutaraldehyde and 2.5% of alkyl dimethyl benzyl ammonium chloride.

MATERIALS AND METHODS:

a. Test Animals - Test animals were 10-day old mallard duckling from Whistling Wings, Hanover, IL 61041.

b. Dosage - Ten birds per dose level; 5 dosage levels plus control (0, 562, 1000, 1780, 3160 and 5620 ppm).

c. Study Design - Birds were tested in battery brooders; temperature was 100 °F for 7 days, then ambient temperature of 83 °F ± 3 °F; photoperiod was 17L/7D.

d. Statistical Analysis - Visual inspection due to lack of mortality.

REPORTED RESULTS:

The study author found the eight-day dietary LC_{50} to be > 5620 ppm.

STUDY AUTHOR'S CONCLUSIONS/QA MEASURES:

The Quality Assurance Office stated that "this study was conducted in conformance with the Good Laboratory Practices as published by the U.S. Environmental Protection Agency, Office of Pesticide Programs (Federal Register, Volume 48, No. 230, November 29, 1983, Pages 53946-53969)."

REVIEWER'S DISCUSSION AND INTERPRETATION OF STUDY RESULTS:

A. Test Procedure:

The test procedure complied with the recommended EPA protocol of October 1982.

B. Statistical Analysis:

No statistics were performed due to lack of mortality.

C. Discussion/Result:

Aqucar X14 is practically nontoxic to mallard duckling with an LC_{50} greater than 5620 ppm.

D. Adequacy of Data:

1. Category: Core for a formulated product

2. Rationale: N/A

3. Repairability: N/A

COMPLETION OF ONE LINER FOR STUDY: Yes

CBI APPENDIX:

42116401

D172503
DPBARCODE (RECORD)
043901, 069105
SHAUGHNESSY NO

REVIEW NO.

EEB REVIEW

DATE IN: 12-26-91 OUT:

CASE # : 113858 REREG CASE #:
SUBMISSION # : S408667 LIST A, B, C, D
ID # : 010352-00031

DATE OF SUBMISSION 11-29-91

DATE RECEIVED BY EFED 12-19-91

SRRD/RD REQUESTED COMPLETION DATE 02-02-92

EEB ESTIMATED COMPLETION DATE 02-02-92

SRRD/RD **ACTION** CODE/TYPE OF REVIEW 305 - Lbl Rev Amnd

MRID #(S) 421104-01

DP TYPE 001 - Submission Related Data Package

PRODUCT MANAGER, NO. J. Lee (31)

PRODUCT NAME(S) AQUCAR 514 Water Treatment Microbiocide

TYPE PRODUCT F R I N H D Microbiocide

COMPANY NAME Union Carbide

SUBMISSION PURPOSE Review data: mallard dietary with

INCLUDE USE(S) Formulation X14

COMMON CHEMICAL NAME Glutaraldehyde plus alkyl dimethyl benzyl ammonium chloride